Detailed Action

This office action is in response to the correspondence received on March 9, 2011.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-6, 8-10, 13-17 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muthiyan et al (US Patent No: 7,328,260) in view of Andrews et al (US Patent No: 6,697,845), hereafter referred to as Muthiyan and Andrews, respectively.

1. With regards to claim 3, Muthiyan teaches through Andrews, in an online network environment, a method for operating a network management system (NMS), the method comprising: receiving a trap message from an agent, the agent having management information base (MIB) information associated therewith *(Muthiyan teaches agents sending trap messages to the system; see column 17, lines 4-6 and 21-22, Muthiyan. Muthiyan also teaches associated MIB; see column 3, lines 27-30, Muthiyan)*; in response to receiving the trap message, transmitting to the agent a request to perform a walk operation, wherein wherein the NMS

receives the MIB information via the walk operation *(see column 59, lines 15-20, Muthiyan)*; updating the received MIB information; and transmitting at least part of the updated MIB information to the agent *(Muthiyan teaches the versioning (updating and transmitting) of the MIB; see column 58, lines 33-42, Muthiyan).*

While Muthiyan teaches managing devices in a network using SNMP, Muthiyan does not explicitly cite the network being a network management system (NMS). In the same field of endeavor, Andrews also teaches using SNMP to manage network devices; see column 2, lines 30-32, Andrews. Andrews teaches how a managed network is a network management system; see column 2, lines 60-63, Andrews. Network management systems allow for network devices to be managed centrally. Therefore it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Muthiyan with those of Andrews to provide a node management scheme; see column 2, lines 30-31, Andrews.

2. With regards to claims 4 and 9, Muthiyan teaches through Andrews, the method wherein the agent stores the MIB information *(see at least column 58, lines 53-55, Muthiyan)*

3. With regards to claims 5, 10 and 16, Muthiyan teaches through Andrews, the method wherein the trap message is a simple network management protocol

(SNMP) trap message and the walk operation is an SNMP walk operation *(see column 8, line 8, and column 57, line 13, Muthiyan).*

4. With regards to claim 6, Muthiyan teaches through Andrews, the method further comprising updating the MIB information to be synchronized with a second MIB *(see column 48, lines 35-64, Muthiyan).*

5. With regards to claim 8, Muthiyan teaches through Andrews, in an online network environment, a method for operating an agent, the method comprising: determining that a change has occurred to management information base (MIB) information associated with the agent *(see column 17, line 62 – column 18, line 6, Muthiyan)*; in response to determining that the change has occurred to the MIB information associated with the agent, transmitting a trap message to a network management system (NMS) *(Muthiyan teaches agents sending trap messages to the system; see column 17, lines 4-6 and 21-22, Muthiyan. Muthiyan also teaches associated MIB; see column 3, lines 27-30, Muthiyan)*; receiving a request to perform a walk operation from the NMS, wherein the walk operation provides the MIB information to the NMS *(see column 59, lines 15-20, Muthiyan)*; and receiving at least part of the MIB information from the NMS, wherein the at least part of the MIB information was updated by the NMS *(Muthiyan teaches the versioning (updating and transmission) of the MIB; see column 58, lines 33-42, Muthiyan).*

While Muthiyan teaches managing devices in a network using SNMP, Muthiyan does not explicitly cite the network being a network management system (NMS). In the same field of endeavor, Andrews also teaches using SNMP to manage network devices; see column 2, lines 30-32, Andrews. Andrews teaches how a managed network is a network management system; see column 2, lines 60-63, Andrews. Network management systems allow for network devices to be managed centrally. Therefore it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Muthiyan with those of Andrews to provide a node management scheme; see column 2, lines 30-31, Andrews.

6. With regards to claim 13, Muthiyan teaches through Andrews, the method wherein determining that the change has occurred comprises determining a change to an object identifier (OID) has occurred *(see at least column 59, lines 7-26, Muthiyan).*

7. With regards to claim 14, Muthiyan teaches through Andrews, a system comprising: a network management system (NMS) comprising a computing device; and an NMS management information base (MIB), wherein the NMS is configured to receive a trap message from an agent that has access to an agent MIB *(Muthiyan teaches agents sending trap messages to the system; see column 17, lines 4-6 and 21-22, Muthiyan. Muthiyan also teaches associated*

MIB; see column 3, lines 27-30, Muthiyan), in response to receiving the trap message, conduct a walk operation on the agent MIB *(see column 59, lines 15-20, Muthiyan)*, and based on a result of the walk operation, update the NMS MIB, wherein the NMS is further configured to transmit at least part of the updated NMS MIB to the agent *(Muthiyan teaches the versioning (updating and transmitting) of the MIB; see column 58, lines 33-42, Muthiyan).*

While Muthiyan teaches managing devices in a network using SNMP, Muthiyan does not explicitly cite the network being a network management system (NMS). In the same field of endeavor, Andrews also teaches using SNMP to manage network devices; see column 2, lines 30-32, Andrews. Andrews teaches how a managed network is a network management system; see column 2, lines 60-63, Andrews. Network management systems allow for network devices to be managed centrally. Therefore it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Muthiyan with those of Andrews to provide a node management scheme; see column 2, lines 30-31, Andrews.

8. With regards to claim 15, Muthiyan teaches through Andrews, the system wherein the NMS stores the NMS MIB and the agent stores the agent MIB *(see column 2, line 55 – column 3, line 10, Muthiyan).*

9. With regards to claim 17, Muthiyan teaches through Andrews, the system wherein the NMS updating the NMS MIB comprises the NMS updating the NMS MIB to be synchronized with the agent MIB *(see column 48, lines 35-64 and column 58, lines 33-42, Muthiyan)*.

10. With regards to claims 19, 21 and 22, Muthiyan teaches through Andrews, the method wherein the MIB information comprises a meta MIB comprising an object table and a trap table, wherein the meta MIB is configured to store an object identifier (OID), and wherein performing the walk operation comprises performing the walk operation on the meta MIB *(see column 38, line 56 - column 39, line 6, Muthiyan)*.

11. With regards to claim 20, Muthiyan teaches through Andrews, the method further comprising: the agent conducting a walk operation on the MIB information; and based on results of the walk operation, the agent regenerating the MIB information *(see column 59, lines 15-26 and lines 59-60, Muthiyan)*.

12. The obviousness motivation applied to independent claims 3, 8 and 14 are applicable to their respective dependent claims.

Response to Arguments

Applicant's arguments with respect to claims 3-6, 8-10, 13-17 and 19-22 have been considered but are moot in view of the new ground(s) of rejection. In lieu of the latest claim amendments a new search has been conducted and the new prior arts, Muthiyan and Andrews have been applied. In addition, in lieu of the claim amendments, the 101 rejection has been withdrawn.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AZIZUL CHOUDHURY whose telephone number is (571)272-3909. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Krista Zele can be reached on (571) 272-7288. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. C./
Examiner, Art Unit 2453

/Krista M. Zele/
Supervisory Patent Examiner, Art Unit 2453